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Oundle and Thrapston Rural District Council

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

A. McINNES
M.B., Ch.B., D.P.H.

1938

KING & SON, PRINTERS, OUNDLE.

Oundle and Thrapston Rural District.

Chairman of Council: R. H. Ward, Esq., Woodford.

Chairman Public Health Committee: W. Woodin, Esq., Wigsthorpe.

Chairman Housing Committee: Major R. A. Muntz, Tansor.

Clerk: H. H. Hassall.

M.O.H. (*Part-time*): A. McInnes, M.B., D.P.H.

Sanitary Inspector, Southern Area: R. W. Barnes, M.R.San.I.
Sanitary Inspector, Northern Area: S. Pargeter, M.R.San.I.

Surveyor, Whole Area: F. J. Short.

NOTE.

Southern Area.—Includes all Northamptonshire villages—with the exception of Stanwick, which is now in the Raunds U.D.—formerly in the old Thrapston Rural District, with the eight added villages of Wadenhoe, Pilton, Thurning, Luddington, Thorpe, Lilford, Achurch, and Wigsthorpe from the old Oundle Rural District.

Northern Area.—Includes all the Northamptonshire villages of the old Oundle Rural District with the exception of the villages named above, together with the whole of the old Easton-on-the-Hill Rural District and the villages of Fineshade, Wakerley, Harringworth, and Laxton from the old Gretton Rural District.

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Oundle and Thrapston Rural District.

Mr. Chairman,

The annual report of the health of the district is given herewith.

The district has an area of 107,337 acres. The population at the middle of 1938 has been estimated to be 16,150, a decrease of 260 in the estimate for the previous year. It is very likely that the population is under-estimated, but the estimated decrease shows the general trend of rural population in this country. Since the combined district came into being in 1935 there has been an excess of births over deaths of 13 in 1935, 43 in 1936, and of 27 in 1938. In 1937 the deaths were in excess of the births by 3. But this district, like most rural districts, is losing population through emigration to the towns. A reasonable distribution of the population throughout the country is a major problem of war as well as of peace, and its solution can be found, at least in part, in giving good housing, piped water supply, water carriage of sewage, and electricity to the villages.

The rateable value at the end of 1938 was £59,032 and the product of a penny rate was £229.

The number of inhabited houses at the end of the year was 5,220.

Birth Rate.—The total number of live births was 253, 140 males and 113 females. Of these 8 were illegitimate, 4 males and 4 females. There were 8 still births, all legitimate, an equivalent of 30·6 per 1,000 of the total of live and still births. The birth rates per 1,000 of population were as below.

	Oundle & Thrapston R.D.	England & Wales	London
Live Births	15·6	15·1	13·4
Still Births	·49	·60	·48

Death Rate.—A total of 226 deaths were registered and of these 112 were males and 114 females. Of the total 74 were inward transfers of residents in the district who died out of the district. The crude death rate for the district was 14 per 1,000 and the standard death rate 10·9 per 1,000. The comparable or standard death rates per 1,000 of population were :—

England and Wales ... 11·6 ; London ... 11·4 ;
Oundle and Thrapston R.D. ... 10·9.

The causes of death were :—

	Males.	Females.
Scarlet Fever	0	0
Measles	0	0
Pulmonary Tuberculosis	3	7
Other Forms of Tuberculosis	2	1
Diphtheria	1	3
Influenza	1	2
Syphilis	0	0

	Males.	Females.
Cancer	12	18
General Paralysis of Insane	0	0
Liver Diseases	0	3
Cirrhosis of Liver	0	0
Diabetes	1	6
Cerebral Haemorrhage	8	8
Heart Disease	32	32
Bronchitis	8	4
Pneumonia	2	2
Other Respiratory Diseases	2	0
Ulcer of Stomach or Duodenum	0	0
Other Digestive Diseases	2	3
Appendicitis	1	1
Nephritis	2	0
Congenital Debility, etc.	4	4
Senility	5	8
Other Circulatory Diseases	5	3
Other Defined Diseases	11	4
Ill Defined	3	1
Other Violence	5	0
Puerperal Sepsis	0	1
Other Puerperal Causes	0	1
Diarrhoea	0	1
Suicide	1	1
Whooping-Cough	0	0
Cerebro-Spinal Fever	0	0
Aneurysm	1	0
	112	114

The age and sex distribution of the deaths were :—

Years	90	80	70	60	50	40	30	20	15	10	5	1	Under 1
Males	2	36	24	23	16	3	0	2	0	2	2	1	6
Females	4	28	32	11	8	5	3	5	3	1	0	2	6
Totals	6	64	56	34	24	8	3	7	4	3	2	3	12

Deaths from Puerperal Causes.—

		Rate per 1,000 Births (live & still)	
	Deaths	Oundle & Thrapston	England & Wales
Puerperal Sepsis	1	3·8	·86
Other Puerperal Causes	1	3·8	2·11
	2	7·6	2·97

The case of Puerperal Sepsis was from Benefield and died at Northampton General Hospital.

The other death was due to Placenta Praevia with toxaemia.

Infantile Mortality.—There were 12 deaths of children under the age of 1 year, equally divided as to sex. One of the deaths was of an illegitimate child. The causes of death were :—

Sepsis of Cord	1
Premature Birth	1
Spina Bitida	3
Convulsions	1
Pneumonia	2
Asphyxia	1
Operation Cleft Palate...	1
Difficult Birth	2
Total	12

On a basis of 12 deaths the infantile mortality rates were :—

	All Infants		Rate per 1,000 live Births :— Legitimate Infants per 1,000 Legitimate Births	Illegitimate Infants per 1,000 Illegitimate Births
Oundle and Thrapston	47	...	44·0	125·0
England and Wales ...	53	...	Unknown	Unknown
London	57	...	Unknown	Unknown

Measles.—There was no death from this cause.

Whooping-cough.—There was no death from this cause.

Diarrhoea and Enteritis under 2 years of age.—One death was registered as from this cause, making a rate of 4 per 1,000 births as against a rate of 5·5 per 1,000 births for the whole of England and Wales.

Cancer.—There died from Cancer 12 males and 18 females. These numbers are 13·2 % of total deaths from all causes, or 1·8 per 1,000 of population. Particulars are given below of 27 of the deaths.

Stomach, Liver and Pancreas		Rectum and Colon		Prostate and Urinary System		Breast and Generative Organs		Oesophagus and Pharynx		Other Organs	
Age		Age		Age		Age		Age		Age	
M	F	M	F	M	F	M	F	M	F	M	F
71	79	76	73	86	0	0	82	82	63	0	0
70	75	69		71			82	55			
	61	67					74				
	50	66					72				
	43	66					68				
		57					57				
							53				
							52				
2	5	6	1	2	0	0	8	2	1	0	0

Lectures on Cancer were given at Brigstock, Chelveston, Woodford, Fotheringhay, Woodnewton, Bulwick, King's Cliffe, Achurch, Tansor, and Ringstead under the auspices of the British Empire Cancer Campaign. The lectures were given by doctors practising in the villages. The lectures described in a general way the nature of Cancer and stressed the necessity for early diagnosis, and evidence was given of the hopefulness of treatment if undertaken early. Questions were invited after the lectures.

Infectious Diseases.—Notifications, other than Tuberculosis, are given below :—

Disease	Total Cases notified	Cases admitted to Hospital	Total Deaths
Scarlet Fever	5	2	0
Erysipelas	2	0	0
Pneumonia	5	0	3
Ophthalmia Neonatorum	0	0	0
Puerperal Pyrexia	4	3	1
Diphtheria	24	14	4
Paratyphoid	0	0	0
Cerebro-Spinal Fever	0	0	0

Scarlet Fever.—One case each was notified from Hargrave, Lilford, Southwick, Fotheringhay, and Thrapston. The five cases give a notification rate of ·3 per 1,000 of population ; that for England and Wales 2·41. There was no death. In England and Wales the death rate from Scarlet Fever was ·01 per 1,000 of population. The age and sex distribution of the cases notified were as below :—

Age Periods	M	F
Years 0	0	0
1	0	0
5	2	1
15	0	0
25	0	1
35	0	1
45	0	0
55	0	0
65	0	0
	2	3

Erysipelas.—There was one case each from Deene and Warmington. The notification rate was thus ·12 per 1,000 of population ; for England and Wales ·4 per 1,000.

Pneumonia.—Five cases were notified, 2 from Woodford and 1 each from Ringstead, Bulwick, and Islip. Four deaths were registered as due to Pneumonia. It must not be concluded that the death rate in Pneumonia is 80 %. Only one of the cases notified died ; the other deaths were inward transfers ; and moreover all cases of Pneumonia are not notified. The death rate in Pneumonia has always been high, but the modern treatment by chemotherapy has greatly diminished the fatality rate.

Puerperal Pyrexia.—Four cases were notified, one each from Titchmarsh, Slipton, Collyweston, and Caldecott. The one death from Puerperal Sepsis had not been notified, so that there were actually 5 cases in the district. The rise of temperature in the patient from Caldecott was due to onset of acute Miliary Tuberculosis after birth. The patient had been notified as suffering from Pulmonary Tuberculosis before marriage and has since died. The notification rate for Puerperal Pyrexia was for this district 15·3 per 1,000 live and still births ; that for England and Wales 14·42. The death rates from Puerperal Sepsis are given under the heading Deaths from Puerperal Causes.

Diphtheria.—Not a single case was notified in 1937, but in 1938 a total of 24 cases were notified. Details are given below :—

	No.	Period	Hospital	Deaths	Age at Death
Tansor	2	March-April	2	2	4½ and 5
Polebrook	1	March	0	1	5
Warmington	2	April-May	1	0	
Lowick	1	May	0	0	
Yarwell	4	July-August	4	0	
Islip	12	Nov.-Dec.	6	1	36
Thrapston	1	Nov.	0	0	
Achurch	1	Dec.	0	0	
	24		14	4	

Time and situation would suggest that the cases at Tansor, Polebrook, and Warmington had a common origin, although the children in each village had never met the children from the other villages. The two cases at Tansor lived next door to each other. The case at Lowick was of a schoolboy attending Laxton School, Oundle. Yarwell cases were self-contained. The case at Thrapston had been in contact with the cases at Islip. No connection could be discovered between the case at Achurch and those at Islip.

At Islip the numbers affected assumed the proportions of a small epidemic. The first notification was received on November 20th and the last case in the year 1938 on December 12th. The epidemic was then carried on into the year 1939, when a case was notified on January 6th and no further case notified until February 7th. Between February 7th and February 21st, 1939, 8 cases were notified. This was the end of the epidemic, in which 21 cases were notified, and of this number 4 were ambulant cases without any clinical evidence of the disease. The 21 cases came from 14 homes ; 3 homes provided 2 each and 1 home provided 5. In the home providing 5 cases, one child had a sore nose which was swabbed three times before a positive swab was declared. The first two swabs yielded streptococci only. In the intervals between the swabbings other members of the family developed clinical signs of the disease. The child with the sore nose never did develop clinical signs of the disease, but was sent to hospital immediately a swab was reported positive. After the first case was notified the homes of children absent from school were visited and two cases of clinical Diphtheria were found with no doctor in attendance. The doctors in attendance took 99 swabs and the Medical Officer 69 in all during the epidemic.

The school at Islip was closed from 21/11/38 until 5/12/38. Contacts were given a dose of from 1,000 to 1,500 units of anti-toxin by their own doctors. With the exception of the patient who died, the disease did not appear to be of a virulent type. The four children giving positive swabs, although showing no clinical signs of the disease, had some nasal discharge, and swabs were taken of this discharge.

The following memorandum was issued to the P.H. Committee of the Council :—

SPECIAL REPORT. DIPHTHERIA IMMUNISATION.

Diphtheria is a disease caused by a bacillus. Any part of the body may be affected, but preference is shown for the upper respiratory passages, such as the larynx, throat and nose. Contrary to most infectious diseases caused by bacilli, the Diphtheria organism does not enter the blood stream, but remains localised at the original site, where it produces its powerful poisons which do enter the blood stream. These poisons or toxins have a particular affinity for muscular and nervous tissue, causing paralysis of the structures affected. The commonest cause of death in Diphtheria is from paralysis of the muscles of the heart.

Treatment.—The process of natural cure in Diphtheria is by the production, in the laboratory of the blood, of a substance which destroys or neutralises the toxins produced by the germs. These substances are known as anti-toxins. The anti-toxin of treatment is the blood serum of a horse that has been methodically injected with doses of Diphtheria toxin, so that it does not suffer in health, with the result of the production of large quantities of anti-toxins in its blood. The horse is afterwards bled and the serum separated and tested for strength and freedom from deleterious substances of any kind. The injection of such anti-toxin into a human being will neutralise the Diphtheria toxin circulating in the blood, but it has little effect on the toxins which have already become fixed in the nerves and muscles. Hence the necessity for early injection of anti-toxin and plenty of it.

Carriers.—A carrier is properly defined as a person who carries *virulent* Diphtheria bacilli, usually in the respiratory passages, but does not suffer from the disease himself. By reason of the virulence of the bacilli such a person can infect others with a virulent form of the disease. Often enough, however, a swab may give a growth of bacilli which have all the cultural characteristics of the Diphtheria bacillus, yet the history shows that no other person has been infected. In other words the germs are devoid of virulence. There are no ready means of distinguishing between virulent and avirulent germs. Often the only thing to do is to wait for months and see what happens. Moreover, our knowledge of the natural history of bacilli of any kind is not great enough for us to say what are the conditions which cause a virulent strain to become avirulent and vice versa. Complication is further introduced by the great variation in resistance among human beings. The control of Diphtheria amongst a non-immunised population is a most difficult and expensive problem.

IMMUNISATION.—The principle of immunisation in the human being is on similar lines as used in the production of anti-toxins in the blood of the horse. The best method, in my opinion, is the injection of a certain amount of a mixture of toxin and anti-toxin for three injections at fortnightly intervals. There is usually no reaction and no ill effects. This is a process of " active immunisation " ; that is, the patient develops his own anti-toxin and keeps it for life.

The method of giving anti-toxin to contacts is known as " passive immunity," and lasts for only two or three weeks at most. Here the anti-toxin was produced by the horse and being foreign to human blood soon dies out. Toxins alone can produce an anti-toxin, and the body must have experienced the stimulus of toxin to keep on producing anti-toxin.

Prevention of Diphtheria.—The following is taken from the Report of the Medical Research Council for the year 1937-38.

" One of the most striking instances of the delay in the application of new knowledge is the relative lack of public recognition, in Great Britain at the present time, of the existence of a method of proven value for the prevention of diphtheria. Diphtheria is the commonest single cause of death among school children. In 1937, there were 61,339 cases of this disease in England and Wales, causing 2,963 deaths, nearly all in children between the ages of 1 and 15 years. This is pure tragedy, in view of the needlessness of such deaths, for since 1929 prophylactic inoculation against diphtheria has proved increasingly successful wherever it has been properly used. In parts of the United States and of Canada (notably in the Province of Ontario), diphtheria as a clinical entity has practically disappeared, as the result of preventive inoculation with diphtheria toxoid. In the town of Hamilton, Ontario, with a population of 175,000, not one case of diphtheria has been diagnosed in the past five years. In the city of Quebec, on the other hand, where prophylaxis by inoculation of diphtheria toxoid was not used, the deaths from diphtheria in 1936 were even more numerous than in 1927. In New York City there has been a reduction in diphtheria incidence from 8,548 cases in 1929 to 1,143 in 1936, and a reduction in deaths from 463 to 35, following the introduction of preventive inoculation. In 1936 the death rate of children during the ages 1 to 15 from diphtheria was 2·1 per 100,000 in New York, and 31·8 per 100,000 in England and Wales.

" As long ago as 1932 the Ministry of Health drew the special attention of local authorities to the advantages of this prophylactic treatment, and in his most recent annual report the Chief Medical Officer again urges its adoption. It is true that it is sporadically used here, but for complete effectiveness the method must be generally applied, and not limited to a small proportion of children in any community. Parents would be well advised, therefore, to demand this prophylactic inoculation, not only for their own children but for all children. There seems no room for doubt that the general adoption of diphtheria prophylaxis would cause the virtual disappearance of the disease from the country. The family tragedies, the high public expense, and the waste of medical effort caused in Great Britain by diphtheria call for a united effort to eradicate it."

Cost for School Population of Rural District.—The number of children attending elementary schools in the whole district is about 1,850. The process of testing if a child is susceptible or insusceptible to Diphtheria by what is known as the Schick Test is a more painful proceeding than the injection for immunising purposes, and for this reason might constitute an administrative problem. Therefore Schick testing should not be carried out. If a doctor was allowed 1/- for each injection, and this appears reasonable if a large number are injected, the cost would be :—

Materials (allowing 33⅓ % discount) ...	£222	0	0
Administrative expenses	277	10	0
Total ...	£499	10	0

Diphtheria Immunisation.—Seven children attending Tansor school were given a course of injections for the purpose of active immunisation against Diphtheria. The material used was T.A.F. (Burroughs Wellcome). There was no complaint of local or general reaction.

Tuberculosis.—The table below gives particulars of notifications and deaths. The villages of origin were : *Pulmonary*—Thrapston 3, Islip 1, Woodford 3, Twywell 1, King's Cliffe 2, Hargrave 1, Duddington 1 ; *Non-Pulmonary*—Thrapston 2, Brigstock 1, Woodford 1. Three of the non-pulmonary deaths had never been notified, all three cases dying in Northampton General Hospital. Five of the pulmonary deaths died in the year of notification. At the end of the year there were on the register 88 pulmonary and 21 non-pulmonary cases. During the year 15 cases entered Rushden Sanatorium, 1 Manfield Orthopaedic Hospital, 1 Papworth, and 1 Brompton. No action was taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Sec. 62 of the Public Health Act, 1925, or Sec. 172 Public Health Act, 1936.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
0	0	0	0	0	0	0	0	0
1	0	0	0	2	0	0	0	0
5	0	0	1	0	0	0	2	0
15	1	3	0	0	2	3	1	1
25	2	3	0	1	0	2	0	0
35	1	0	0	0	0	0	0	0
45	0	0	0	0	2	0	0	0
55	1	1	0	0	1	1	0	0
65 and upwards ...	0	0	0	0	0	0	0	0
Totals	5	7	1	3	5	6	3	1

Water Supplies.—The district has two main supplies—one at Woodford and the other at Barnwell. The supply at Barnwell has both filtrating and chlorinating plant. There is chlorinating plant at Woodford and the Council accepted a tender for the addition of filtrating plant to this supply at a cost of about £2,000.

The consulting engineers to the Council have drawn up a report on the water supplies of the district and put forward alternative schemes for the supply of those villages of the district at present inadequately supplied. An estimated cost of £83,000 was accepted by the Council as reasonable, provided maximum grants would be received from the County Council.

Analyses of the main supplies are given below. Samples were taken of a number of private wells and all gave uniformly bad analyses.

Woodford Supply.

1st Analysis since chlorination.

CERTIFICATE OF ANALYSIS. WOODFORD WATER.

Sample of Water received on the 27th April, 1938, from Oundle and Thrapston Rural District Council, and labelled " Woodford Water." Chlorinated. Drought period.

Public piped supply.

Physical Characters	Good
Reaction	pH 7·6
The sample contained :—	Parts per 100,000
Total Solid Matter	55·5
Chlorine	3·1
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0006
Oxygen absorbed in 3 hours at 37° C. ...	0·0559
Nitrates (expressed as Nitrogen)	0·15
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of micro-organisms per ml. developing on Agar at 37° C.=*nil*

Number of micro-organisms per ml. developing on Agar at 21° C.=*nil*

Microscopical Examination of Deposit. None.

Total Hardness. 21·42 degrees (English).

Inference.—The results obtained on the analysis of this sample do not show any evidences of pollution.

I am of opinion that this water is fit for drinking purposes.

Signed, S. GREENBURGH,
Public Analyst.

2nd May, 1938.

CERTIFICATE OF ANALYSIS. WOODFORD WATER.

Sample of Water received on the 7th June, 1938, from Oundle and Thrapston Rural District Council, and labelled " Woodford Water." Chlorinated.

Public piped supply.

Physical Characters	Good
Reaction	pH 7·6
The sample contained :—	Parts per 100,000
Total Solid Matter	54·6
Chlorine	3·25
Ammonia (Free and Saline)	0·0006
,, (Albuminoid)	Absent
Oxygen absorbed in 3 hours at 37° C. ...	0·0325
Nitrates (expressed as Nitrogen)	0·15
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of micro-organisms per ml. developing on Agar at 37° C.=*nil*

Number of micro-organisms per ml. developing at 21° C.=1

Microscopical Examination of Deposit. None.

Total Hardness. 21·42 degrees (English).

Inference.—The results obtained on the analysis of this sample do not show any evidences of pollution.

I am of opinion that this water is fit for drinking purposes.

Signed, S. GREENBURGH,
Public Analyst.

11th June, 1938.

Barnwell Supply.

CERTIFICATE OF ANALYSIS. BARNWELL WATER.

Sample of Water received on the 25th April, 1938, from Oundle and Thrapston Rural District Council, and labelled "Northern No. 8 (Regional Supply No. 2, Barnwell Water)." Filtered and chlorinated.

Public piped supply.

Physical Characters	Good
Reaction	pH 7·7

The sample contained :—	Parts per 100,000
Total Solid Matter	52·5
Chlorine	2·2
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0006
Oxygen absorbed in 3 hours at 37° C.	0·0372
Nitrates (expressed as Nitrogen)	0·30
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of micro-organisms per ml. developing on Agar at 37° C.=*nil*

Number of micro-organisms per ml. developing on Agar at 21° C.=*nil*

Microscopical Examination of Deposit. None.

Total Hardness. 18·86 degrees (English).

Inference.—The results obtained on the analysis of this sample do not show any evidences of pollution.

I am of opinion that this water is fit for drinking purposes.

Signed, S. GREENBURGH,
Public Analyst.

29th April, 1938.

CERTIFICATE OF ANALYSIS. BARNWELL WATER.

Sample of Water received on the 6th October, 1938, from Oundle and Thrapston Rural District Council, and labelled "Northern No. 12 (Regional Water Supply No. 2, Barnwell)." Filtered and chlorinated.

Public piped supply.

Physical Characters	Very slight deposit, otherwise good
Reaction	pH 7·6

The sample contained :—	Parts per 100,000
Total Solid Matter	53·2
Chlorine	2·45
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0040
Oxygen absorbed in 3 hours at 37° C.	0·0316
Nitrates (expressed as Nitrogen)	0·20
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of micro-organisms per ml. developing on Agar at 37° C.=*nil*

Number of micro-organisms per ml. developing on Agar at 21° C.=*nil*

Microscopical Examination of Deposit. Mainly mineral matter.

Total Hardness. 20·12 degrees (English).

Inference.—The results obtained on the analysis of this sample do not show any evidences of pollution with harmful organic or inorganic matter.

I am of opinion that this water is fit for drinking purposes.

Signed, S. GREENBURGH,
Public Analyst.

10th October, 1938.

Brigstock Supply.

CERTIFICATE OF ANALYSIS. BRIGSTOCK WATER.

Sample of Water received on the 13th January, 1938, from Oundle and Thrapston Rural District Council, and labelled
" Brigstock Water."

Public piped supply.

Physical Characters	Slight deposit, otherwise good
Reaction	pH 7·5

The sample contained :—	Parts per 100,000
Total Solid Matter	68·4
Chlorine	2·9
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0028
Oxygen absorbed in 3 hours at 37° C. ...	0·0203
Nitrates (expressed as Nitrogen)	0·25
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.
Number of micro-organisms per ml. developing on Agar at 37° C.=2
Number of micro-organisms per ml. developing on Agar at 21° C.=48

Microscopical Examination of Deposit. Mainly mineral matter.

Total Hardness. 24·22 degrees (English).

Inference.—The results obtained on the analysis of this sample indicate a water containing little organic matter, though slightly contaminated with micro-organisms which, however, do not appear to be of a harmful nature.

I am of opinion that this water is safe for drinking purposes.

Signed, S. GREENBURGH,
18th January, 1938. Public Analyst.

Easton Supply.

CERTIFICATE OF ANALYSIS. EASTON WATER.

Sample of Water labelled " Northern No. 15, Easton Public Supply " received on the 29th November, 1938, from Oundle and Thrapston Rural District Council.

Public standpipe supply.

Physical Characters	Good
Reaction	pH 7·4

The sample contained :—	Parts per 100,000
Total Solid Matter	52·8
Chlorine	2·35
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0044
Oxygen absorbed in 3 hours at 37° C. ...	0·0368
Nitrates (expressed as Nitrogen)	0·65
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms absent in 100 mls.

Number of micro-organisms per ml. developing on Agar at 27° C.= 1 +mould

Number of micro-organisms per ml. developing on Agar at 21° C.=8

Microscopical Examination of Deposit. None.
Total Hardness. 20·56 degrees (English).

Inference.—The results obtained on the analysis of this sample do not show any evidences of pollution with harmful organic or inorganic matter.

I am of opinion that this water is fit for drinking purposes.

Signed, S. GREENBURGH,
5th December, 1938. Public Analyst.

Bulwick Supply.

CERTIFICATE OF ANALYSIS. BULWICK WATER.

Sample of Water labelled "Northern No. 16, Bulwick Water Supply" received on the 29th November, 1938, from Oundle and Thrapston Rural District Council.

Piped supply.

Physical Characters	Slight deposit, otherwise good
Reaction	pH 7·5
The sample contained :—	Parts per 100,000
Total Solid Matter	55·2
Chlorine	2·8
Ammonia (Free and Saline)	Absent
,, (Albuminoid)	0·0026
Oxygen absorbed in 3 hours at 37° C. ...	0·0520
Nitrates	Absent
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms present in 50 mls.
,, ,, present in 4 out of 5 × 10 mls.
,, ,, absent in 5 out of 5 × 1 mls.
Probable number of B. Coli in 100 mls. = 13.
Number of micro-organisms per ml. developing on Agar at 37° C. = 4
Number of micro-organisms per ml. developing on Agar at 21° C. = 240

Microscopical Examination of Deposit. Mainly mineral matter and a little organic debris.

Total Hardness. 21·68 degrees (English).

Inference.—The results obtained on the analysis of this sample indicate a water containing little organic matter, though contaminated with micro-organisms of sewage type. Compared with an analysis of the water from this source (see report 23/3/37), the present sample shows an improvement in the chemical constitution and a deterioration in the bacteriological condition.

Whilst this water cannot be regarded as being unfit for drinking purposes it cannot in its present condition be recommended for a public supply.

Signed, S. GREENBURGH,
5th December, 1938. Public Analyst.

Benefield Supply.

CERTIFICATE OF ANALYSIS. BENEFIELD WATER.

Sample of Water labelled "Northern No. 13, Benefield Water Supply" received on the 1st November, 1938, from Oundle and Thrapston Rural District Council.

Piped supply.

Physical Characters	Very slight deposit, otherwise good
Reaction	pH 7·7

The sample contained :—	Parts per 100,000
Total Solid Matter	86·3
Chlorine	4·2
Ammonia (Free and Saline)	0·0040
,, (Albuminoid)	0·0088
Oxygen absorbed in 3 hours at 37° C.	0·0695
Nitrates (expressed as Nitrogen)	0·05
Nitrites	Absent
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms present in 1 ml.

Number of micro-organisms per ml. developing on Agar at 37° C.= 17+mould.

Number of micro-organisms per ml. developing on Agar at 21° C.=92

Microscopical Examination of Deposit. Mineral matter, organic debris and a few protozoa.

Total Hardness. 25·22 degrees (English).

Inference.—The results obtained on the analysis of this sample indicate a water containing little organic matter, though contaminated with micro-organisms of sewage type.

I am of opinion that this water is unsafe for drinking purposes.

Signed, S. GREENBURGH,
4th November, 1938. Public Analyst.

A similar inference was drawn from a sample analysed February, 1938

Stoke Doyle Supply.

CERTIFICATE OF ANALYSIS. STOKE DOYLE WATER.

Sample of Water labelled " Northern No. 14, Stoke Doyle Water Supply " received on the 1st November, 1938, from Oundle and Thrapston Rural District Council.

Well water.

Physical Characters	Slight deposit, faintly turbid, odourless
Reaction	pH 7·7
The sample contained :—	Parts per 100,000
Total Solid Matter	66·8
Chlorine	5·9
Ammonia (Free and Saline)	0·0008
,, (Albuminoid)	0·0292
Oxygen absorbed in 3 hours at 37° C.	0·2640
Nitrates (expressed as Nitrogen)	0·05
Nitrites	Absent
Poisonous Metals	Zinc, a trace

Bacteriological Examination.

Coliform organisms present in 1 ml.

Number of micro-organisms per ml. developing on Agar at 37° C. =14+mould

Number of micro-organisms per ml. developing on Agar at 21° C. =120+mould.

Microscopical Examination of Deposit. Mineral matter and organic debris.

Total Hardness. 22·34 degrees (English).

Inference.—The results obtained on the analysis of this sample indicate a water contaminated with organic matter and with micro-organisms of sewage type.

I am of opinion that this water is unfit for drinking purposes.

Signed, S. GREENBURGH,
Public Analyst.

4th November, 1938.

Blatherwycke Supply.

CERTIFICATE OF ANALYSIS. BLATHERWYCKE WATER.

Sample of Water received on the 13th January, 1938, from Oundle and Thrapston Rural District Council, and labelled "Northern No. 2, Blatherwycke Village Supply."

Well water.

Physical Characters	Very slight deposit, faint turbidity, odourless
Reaction	pH 7·5

The sample contained :—	Parts per 100,000
Total Solid Matter	61·2
Chlorine	1·8
Ammonia (Free and Saline)	0·0018
,, (Albuminoid)	0·0064
Oxygen absorbed in 3 hours at 37° C. ...	0·0470
Nitrates (expressed as Nitrogen)	0·45
Nitrites	Faint trace
Poisonous Metals	Absent

Bacteriological Examination.

Coliform organisms present in 1 × 50 ml.
,, ,, present in 1 out of 5 × 10 mls.
,, ,, absent in 5 out of 5 × 1 mls.

Probable number of Coliform organisms per 100 mls. = 3.

Number of micro-organisms per ml. developing on Agar at 37° C. = 12 and mould.

Number of micro-organisms per ml. developing on Agar at 21° C. = 760

Microscopical Examination of Deposit. Mainly mineral matter and a little organic debris.

Total Hardness. 20·20 degrees (English).

Inference.—The results obtained on the analysis of this sample indicate a water slightly contaminated with organic matter and containing fairly large numbers of micro-organisms capable of development at the temperature of the "cool" incubator.

Whilst this water cannot be regarded as being unfit for drinking it cannot in its present condition be recommended for a public supply.

Signed, S. GREENBURGH,
18th January, 1938. Public Analyst.

Scavenging.—Below are details of refuse collections by the Rural District's own lorry.

Parish	Approx. Tonnage	No. of Loads
Aldwincle	26	13
Brigstock	134	72
Chelveston	5½	3
Denford	50	25
Hargrave	3	3
Islip	68	34
Lowick	32½	19½
Ringstead	129½	66
Sudborough	14	9½
Thrapston	371	195½
Titchmarsh	61	28½
Twywell	30	15½
Woodford	321	171
	1245½	655½

Schools.—The only closure, by reason of the prevalence of infectious disease, was that of Islip School from 21/11/38 to 5/12/38 for Diphtheria. Measles affected the attendance at Nassington, Titchmarsh, Aldwincle, and Islip.

Camping Sites.—The Council agreed to adopt Sec. 269 of the P.H.A., 1936, with reference to the control of the use of moveable dwellings.

Eradication of Bugs.—The effect of Sec. 84, P.H.A., 1936, with reference to the cleansing or destruction of filthy or verminous articles, was brought to the notice of the Council.

Housing.—Tables indicating work done are given below.

The reports of the Sanitary Inspectors are given separately for their own areas, but the figures of the inspections in the Housing and Factory Inspection Forms are for the whole area.

A. McINNES.

HOUSING ACT, 1936.

Programme of Capital Works to be undertaken in next Five Years.

The total capital expenditure in respect of housing provisionally included in the programme as submitted to the Minister of Health on Form H. 283 was £93,750.

Section 11. Demolition of Insanitary Houses.

Return of Houses Dealt With During 1938.

Date of Demolition Order	Name of Parish and Situation of Unfit House	Number of persons displaced	Date house closed	Date house actually demolished	Remarks
30/11/34	Station Road, Nassington	4	22/8/38	—	—
23/12/37	High Street, Collyweston	1	—	25/5/38	Tenant not rehoused
23/12/37	Great Green, Warmington	5	10/10/38	—	—

Section 51. Return of Houses Reconditioned during 1938.

Nil

Return of Houses for which Tenders had been accepted by the Local Authority on or before 31st December, 1938, but which were not completed or in process of erection on that date.

Parish	Act or Scheme	Type	Number under each heading	Remarks
Ringstead—High Street	Housing Act, 1936	Bungalows	14	—

Return of Houses the construction of which was completed by the Local Authority between 1st January, 1938, and 31st December, 1938.

Parish	Act or Scheme	Type (e.g., N.P. 2, N.P. 3, &c.)	Number under each heading	Weekly Rent	Rates (Weekly)	Inclusive rent (if charged)	Remarks (e.g., extent of Exchequer Grant, if any)
Thrapston	Housing Act, 1936	N.P.2	6	4/6	2/2	—	45/- per displaced person (11 persons displaced)
Warmington	,,	N.P.3	6	4/3	2/-	—	50/- per displaced person (54 persons displaced)
,,	,,	N.P.4	6	5/-	2/6	—	
Nassington	,,	Bungalows	2	2/6	11d.	—	50/- per displaced person (45 persons displaced)
,,	,,	N.P.3	8	3/6	1/4	—	

Return of Houses in Course of Erection by the Local Authority on 31st December, 1938.

Parish	Act or Scheme	Number under each heading	Remarks
Glapthorne	Housing Act, 1936 (Slum Clearance)	12	—
King's Cliffe	ditto	14	—
Ringstead	ditto	36	—

Section 25. Clearance Areas.

RETURN OF HOUSES DEALT WITH DURING 1938.

Date of Resolution declaring area to be Clearance Area	Date of Clearance Order	Name of Parish and Situation of Area and No.	Number of houses affected	Number of persons displaced	Date houses closed	Date houses actually demolished	Remarks (e.g., Treatment of Area after clearance)
13/2/36	1/10/36	No. 7—Oundle Road, Thrapston	3	4	3/1/38	3/12/38	
13/2/36	1/10/36	No. 8—Oundle Road, Thrapston	4	7	3/1/38	12/10/38	
13/2/36	1/10/36	No. 9—Elderkin Square, Warmington	5	23	22/8/38		
29/10/36	26/11/36	No. 12—Church Street, Warmington	2	16	10/10/38		
18/3/37	1/7/37	No. 15—Duck End, Denford	4	*Nil*	31/12/38	31/12/38	Vacant houses
5/8/37	5/8/37	No. 16—The Spring, Woodford	4	12	11/4/38		
28/10/37	9/6/38	No. 17—Church Street, Nassington	13	41	22/8/38		8 families rehoused
17/2/38	14/4/38	No. 18—Carlow, Ringstead	6				
17/2/38	14/4/38	No. 19—Carlow, Ringstead	3				
17/2/38	14/4/38	No. 20—Chapel Lane, Ringstead	2				
17/2/38	14/4/38	No. 21—High Street, Ringstead	3				
17/2/38	14/4/38	No. 22—Church Street, Ringstead	6				
17/2/38	14/4/38	No. 23—Church Street, Ringstead	3				
17/2/38	14/4/38	No. 24—Pearce's Yard, Ringstead	7				
17/2/38	14/4/38	No. 25—Denford Road, Ringstead	5				
17/2/38	14/4/38	No. 26—Back Lane, Ringstead	2				
14/7/38	14/7/38	No. 27—Workhouse Lane, King's Cliffe	6				
14/7/38	14/7/38	No. 28—Bridge Street, King's Cliffe	4				
14/7/38	14/7/38	No. 29—Back Lane, King's Cliffe	3				

REPORT OF THE SANITARY INSPECTOR (SOUTHERN AREA) FOR THE YEAR ENDING DECEMBER 31st, 1938.

COUNCIL OFFICES,
MIDLAND ROAD,
THRAPSTON.
June 17th, 1939.

DR. A. MCINNES,
MEDICAL OFFICER OF HEALTH,
RAUNDS.

Sir,

I beg to submit my Fourth Annual Report of the Oundle and Thrapston Rural District :—

The Southern Area comprises 25 Parishes, an area of 43,000 acres, approximate population of 9,770, with 2,595 working-class dwellings.

Inspections have been made according to the requirements of the Ministry of Health.

Total number of Inspections	1,931
Nuisances found to exist	319
Nuisances abated	272
Nuisances unabated	47

Water Supplies.—Unsatisfactory conditions prevail in the villages of Aldwincle, Chelveston with Caldecott, Thorpe Achurch, and Wadenhoe. The sources of supply are shallow wells and surface-water cisterns, and can only be regarded with suspicion.

The villages of Luddington, Thurning, Clapton, and part of Wigsthorpe received a piped water supply in May, on the completion of the Regional Water Scheme Number 2 (approximate population 570). Wigsthorpe will be fully connected during 1939.

Regional Scheme No. 1.—On June 14th an inquiry was held at the Council Offices, Thrapston, by G. H. Pritchard, Esq., in respect of Filtration Plant being installed at the Woodford Works, which was subsequently visited by the Inspector, Dr. McInnes, Mr. Short, Mr. Fenby (of Messrs. Pick, Everard & Gimson, Engineers), and myself.

WATER METERS.—82 are in use, viz. :—
Brigstock 16, Clapton 3, Denford 4, Great Addington 1, Hargrave 1, Little Addington 3, Luddington 3, Ringstead 14, Thrapston 19, Thurning 3, Titchmarsh 6, Woodford 9.

WATER ANALYSES.—5 samples were taken and submitted for analysis as under :—

Parish	Source	Result
Brigstock	Public	1 Good
Woodford	Public	2 Good
Aldwincle	Private	1 Unfit
Islip	Private	1 Unfit

Sewers and Sewage Disposal.—At Thrapston the sewer and sewage disposal is inefficient and at Denford and Chelveston the disposals are useless, while at Aldwincle, Hargrave, and Titchmarsh no proper means of disposal of sewage exists.

Prevention of Pollution of Rivers and Streams.—Pollution is evident in Aldwincle, Chelveston, Denford, Hargrave, and Titchmarsh owing to non-treatment of sewage.

Collection of House Refuse.—House Refuse collection is carried out by the Council in the parishes and at periods mentioned below.

Parish	Period of Collection	Parish	Period of Collection
Aldwincle	Monthly	Ringstead	Fortnightly
Brigstock	Fortnightly	Sudborough	Monthly
Chelveston	Monthly	Slipton	Fortnightly
Denford	Fortnightly	Titchmarsh	Monthly
Hargrave	Monthly	Thrapston	Weekly
Islip	Monthly	Twywell	Monthly
Lowick	Fortnightly	Woodford	Weekly

Monthly collection of refuse in Chelveston and Hargrave was commenced in November, and 81 premises were visited and 29 notices issued in respect of provision of covered sanitary bins in Chelveston, with the result that property owners supplied bins in all cases. In Hargrave 48 premises were visited and 21 notices issued in respect of covered sanitary bins, with the result that only 8 dwellings are without proper receptacles.

The Council have power to enforce provision of covered refuse bins under Section 75 of the Public Health Act, 1936, and this should be done, particularly in view of the fact that this area is semi-industrial.

Conversion of Pail Closets to Water Carriage System.—Details of conversion are given below :—

Brigstock	8
Little Addington ...	3
Ringstead	12
Thrapston	1 (Privy)

Conversion of Slop Closets to Automatic Flushing System.—Thrapston 1.

At Woodford the Council carried out this work under contract at a cost of £342 6s. 0d. in 38 properties, and the figure included provision of 38 new pedestal pans, &c., complete, whilst property owners paid for structural alterations of closets in 9 cases and the building of new in 3 cases and the fixing of 1 additional water closet. The work was completed in October.

Number of inspections, 117.

Improvement of Drainage and Sanitary Conveniences in Public Places.

Ringstead Schools and School House : work completed in February.

Infectious Diseases.—Infectious Diseases are as follows :—

Parish	Scarlet Fever	Diphtheria	Tuberculosis	Measles
Hargrave	1	—	—	—
Islip	—	13	1	—
Lilford	1	—	—	—
Lowick	—	1	—	—
Ringstead	—	—	1	—
Thorpe Achurch ...	—	1	—	—
Thrapston	1	1	1	—
Woodford	—	—	1	1
Cases removed to Hospital	1	6	2	1
Deaths	—	1	2	—

Disinfectants were supplied and rooms and bedding, &c., disinfected in 20 cases.

Islip Schools were closed on November 21st, disinfected on the 23rd, and reopened on December 5th.

Following 1 death of Tuberculosis in Woodford, replacement of articles destroyed was made per Public Health Act, 1936, Subsection 4 of Section 167.

Houses inspected under the Public Health Act, 1936, for any existing nuisance.

Home Workers (Factories Act, 1937)	99
Infectious Diseases (including Tuberculosis or Measles)	24
Defective Drains	60
,, Sanitary Accommodation	7
,, Roofs	3
,, Ceilings	2
,, Chimneys	2
,, Spouting	1
Verminous Houses	10
No Refuse Bins	136
Dirty Dwellings	2
Water Supply	30
No Sinks	8
Dampness	1
Other Items	4
Animals and Refuse	4
	393

Inspections.—

Public Health Act, 1936	372
Factories Act, 1937	99
Infectious Diseases	71

Nuisances found to exist and abated :—

	Found	Abated
Infectious Diseases	24	21
Defective Drains	60	60
,, Sanitary Accommodation	7	7
,, Roofs	3	3
,, Chimneys	2	2
,, Ceilings	2	2
,, Spouting	1	1
Dampness	1	1
Verminous Houses	10	10
Dirty Dwellings	2	2
Water Supply	30	6
No Refuse Bins	136	128
No Sinks	8	8
Animals and Refuse	4	4
Other Items	4	4
From 1937	24	13
	318	272

Number of Informal Notices issued	120
,, ,, Statutory ,, ,,	3

Eradication of Bed Bugs.—One Council house in Thrapston was cleared of bugs. Disinfestation is carried out by Council's Inspector in all cases (Cimex method employed).

Factories.—The new Factories Act of 1937 became operative on July 1st, 1938.

The number of Factories is 48, viz. : 24 with mechanical power and 24 without mechanical power.

Means of escape in case of fire (Section 34) where more than 20 persons are employed : Certificate issued 7, relative to 8 factories.

Water supply (Section 41).—In 8 instances notices *re* efficient supply of drinking water were issued.

1 new clothing factory was opened at Thrapston in August.

At Islip and Thrapston respectively repairs and improvements to sanitary accommodation took place.

At Denford and Thrapston respectively repairs were carried out to 2 bakehouses.

In Thrapston a new canteen, together with washing and sanitary convenience comprising 12 wash basins, 6 water closets, and 1 urinal was installed.

Number of inspections : 173.

Cowkeepers, Cowsheds, and Dairies.—Details given below :—

Number of Cowkeepers	80
,, Cowsheds	82
,, Dairies, &c.	82

Number of	Cows	1002
,,	Wholesale Purveyors of Milk ...	32
,,	Retail Purveyors of Milk	47
,,	Butter Makers only	4
,,	Licences issued under the Milk (Special Designations) Order, 1936, in respect of Pasteurised Milk	3
,,	Purveyors of Tuberculin Tested Milk	1
,,	Cowsheds rebuilt or improved (Ringstead)	1
,,	Notices *re* improvement or rebuilding of insanitary Cowsheds, &c., including water supply	6
,,	Notices not complied with	3
,,	Inspections	441

Sampling of Milk.—127 samples were submitted to the Northants. County Council (Public Health Department) for Methylene Blue Test and report of bacteriological count and coliform content.

Details enumerated below :—

Samples	Satisfactory	Bad (T/T.)	Moderate	Satisfactory	Bad (Raw)	Moderate
127	19	—	—	77	22	9

Slaughter-houses, Offensive Trades, &c.—Particulars given below :—

Number of	Private Slaughter-houses (Licensed 10, Registered 5)	15
,,	Licensed Slaughterers	27
,,	Butchers' Shops	20
,,	Fish Frying Establishments	7
,,	Fellmonger	1

Inspections :—

Slaughter-houses...	357
Fish Frying Establishments	49
Fellmonger	4

1 Slaughter-house was repaired and 1 made to conform to regulations, whilst 2 are in abeyance which do not conform to regulations.

Butchers' Shops were regularly visited during the year.

Unsound Foods.—Unsound food was surrendered as follows :—

Carcase	Disease	Weight
Stirk	Tuberculosis	40 lb.
Bananas	... ...	2 ,,
Oranges	... ...	1½ ,,
		43½ ,,

Rats and Mice (Destruction) Act, 1919.—During Rat Week, November 7th to 12th, all refuse tips and sewage disposals were treated with cyanogas, a procedure which is frequently carried out throughout the year.

Petroleum Act, 1928.—Licences were issued as under :—
Petrol 29. Carbide 6. Inspections 37.

Shops Act, 1934.—Number of shops in the area is 150.
Drinking water supply was provided in 1 shop.
Inspections, 16.

New Buildings.—At Thrapston a new Clothing Factory and a new Canteen at the Iron Foundry were erected.
At Woodford a Church Hall is in course of erection.

Housing—New Dwellings.—Details of dwellings erected given below.

Parish	Houses	Bungalows	Bungalows Rebuilt
By private enterprise :—			
Aldwincle ...	—	1	—
Brigstock ...	7	1	—
Denford ...	—	—	1
Thrapston ...	21	—	—
Rebuilt by Grant, Rural Workers' Act, 1926–35 :—			
Denford ...	2	—	—
Islip	1	—	—
Thrapston ...	1	—	—
Wadenhoe ...	1	—	—
By Rural District Council :—			
Thrapston ...	6	—	—

Total Dwellings ... 42

Inspections, including testing of drains ... 70

Dwellings in course of erection (not completed in 1938).
By Grant, Rural Workers' Act, 1926–35 ... Sudborough 2
By Rural District Council ... ... Ringstead 28
(Part scheme of 50)

Particulars of Dwellings owned and controlled by the Council.—As under.

Parish	Acts	Dwellings
Addington, Great ...	1924 ...	6
Brigstock	1924 ...	8
Hargrave	1919 ...	6
Islip	1919 ...	4
Lowick	1919 ...	4
Ringstead	1919 ...	6
Ringstead	1924 ...	6
Thrapston	1919 ...	26
Thrapston	1924 ...	16
Thrapston	1930 ...	20
Thrapston	1936 ...	6
Titchmarsh	1924 ...	6
Woodford	1924 ...	18
Woodford	1930 ...	35
		167

Housing Act, 1935. Section 6 (3).

Number of houses measured (Form "B") *re* permitted numbers ... 123.

Housing Act, 1936.

Ringstead Clearance Areas 18 and 24
(Carlow Road and Pearce's Yard).

On July 21st an inquiry was held by A. Archer Beetham, Esq., at the Temperance Hall, Ringstead, and clearance orders were subsequently confirmed by the Ministry of Health declaring that 13 dwellings were unfit for habitation. Further, in company with the Ministry's Inspector, 37 other unfit dwellings were inspected in Ringstead on the same day.

I am, Sir,
Yours obediently,
ROBERT W. BARNES, M.R.San.I.,
Sanitary Inspector.

REPORT OF THE SANITARY INSPECTOR (NORTHERN AREA) FOR THE YEAR ENDING DECEMBER 31st, 1938.

20 MARKET PLACE,
OUNDLE,
NORTHANTS.
June 14th, 1939.

DR. A. MCINNES,
MEDICAL OFFICER OF HEALTH,
RAUNDS,
WELLINGBOROUGH.

Sir,

I beg to submit my fourth Annual Report for the Northern Area of the district, as regards Nuisances, Sanitary Requirements, and Works completed for the year 1938.

Water Supplies.—During the year Regional Water Supply Scheme No. 2 was successfully completed, and a public water supply was available for five villages of the Northern Area—Barnwell, Hemington, Lutton, Polebrook, and Warmington, some 61 % of the available premises being connected up.

The Northern Area still has 13 parishes without any form of a *piped* supply, and 21 without *adequate* public supplies.

Four village supplies (springs and wells) have been repaired. 167 visits were made with respect to water supplies.

Analyses.—16 samples of water were taken for chemical and bacteriological examination—i.e., Benefield 2, Blatherwycke 1, Bulwick 1, Duddington 2, Easton 1, Stoke Doyle 1, Warmington 2, and Regional Supply Scheme No. 2 6, of which only Easton and No. 2 Regional Supply were returned as satisfactory.

Rivers Pollution Prevention Act.—No complaints were received during the year.

Sewers and Sewage Disposal.—30 complaints of defective sewers and choked dykes were dealt with in 15 parishes, and 152 visits of inspection and re-inspection were made.

The larger villages with a piped water supply should be provided with proper water carriage and sewage disposal systems in lieu of the existing unsatisfactory methods of earth-closet refuse and sewage disposal.

Refuse Collection and Disposal.—A system of collection and disposal is urgently required for the whole of the Area: at present 7 out of the 29 parishes have a form of collection and disposal in operation.

57 visits were made to the various refuse tips.

Public Health Acts—Nuisances.—The following nuisances came under observation during the year:—

	Found	Abated
Defective dwelling-houses	14	9
Dirty dwelling-houses	2	2
Dangerous buildings	6	5
Insufficient and defective earth-closets	18	17
Defective privy-vaults	8	9
Foul and defective drains	48	51
Insufficient and defective water supplies	11	11
Defective spouting and yard paving ...	8	6
The keeping of animals so as to be a nuisance	1	—
Offensive accumulations	17	17
Caravans and tents	1	1
Insanitary and defective urinals ...	1	3
Defective bakehouse	1	—
Dirty bakehouse	1	1
Sanitary conveniences in factories unsuitable or defective	1	1

—a total of 185 including 47 brought forward from 1937, of which 133 were abated and 52 carried forward to 1939. 168 visits of inspection and 183 of re-inspection were made, and 253 appointments kept.

Eradication of Bed Bugs.—During the year 3 private houses were found to be infested with bed bugs and were treated with "Cimex" pattern fumigators and Lawes' insecticide.

Disinfestation was carried out by the Local Authority. Periodical observation has been kept on the one case transferred to a Council house.

Shops Act, 1934.—There are 83 shops within the area, of which 76 are under the supervision of the occupier or his or her family. 24 visits of inspection were made.

Infectious Disease and Disinfection.—14 cases of Infectious Disease were notified, of which 11 were treated at the Isolation Hospital: all premises were fumigated and disinfectants supplied. 4 other premises and 3 Elementary Schools (Polebrook, Tansor, Yarwell) were fumigated. 80 visits were paid to these premises.

Rats and Mice (Destruction) Act, 1919.—Red Squill poisons in the form of biscuits and fluid were again supplied to the public throughout the year: the demand during Rat Week was satisfactory, with good results reported.

All refuse tips were baited periodically and treated with "cyanogas," 35 visits being made.

Petroleum (Consolidation) Act, 1928.—3 new applications were granted, 23 licences were renewed for the storage of petrol, and 1 new application and 7 licences for the storage of carbide of calcium were issued during the year.

34 visits of inspection were made.

Milk Supply.—During the year, 8 new premises were added to the register and 12 were removed: the figures now read 136 cowkeepers, 3 retail purveyors of milk, and approximately 1,289 milch cows.

1 supplementary licence for the sale of Pasteurised Milk was issued in accordance with the provisions of the Milk (Special Designations) Order, 1936.

Reconstruction or improvements were carried out at 12 premises, 341 visits were paid to farms and cowkeepers' premises.

107 samples of milk were submitted to the County Laboratory during the year for the Methylene Blue Reduction Test, with the following results : Good—75, Moderate—17, and Bad—15.

Further samples of the " moderate " and " bad " supplies were returned as " good " in 14 instances ; and 3 premises from which similar supplies were obtained were closed down.

Meat and other Foods.—There are 8 registered and 2 licensed slaughter-houses, 1 knacker's yard, and 12 retail butchers' shops within the district.

During the year, the licences with respect to 2 slaughter-houses and 21 slaughter-men were renewed, and 2 additional licences to slaughter animals were issued. The Council included all animals to be subject to the provisions of Section 1 of the Slaughter of Animals Act, 1933, by resolution dated November 10th, 1938.

256 visits were paid to slaughter-houses and butchers' premises.

The quality of the meat killed within the area maintained its usual high standard, 1 sheep's carcase only being condemned and destroyed.

Housing.—During the year 22 houses to rehouse displaced tenants from Clearance Areas Nos. 9 and 12 (Warmington) and 17 (Nassington) were completed and occupied ; and 26 were in course of erection to rehouse tenants from individual unfit and 4 clearance areas—Nos. 13 (Glapthorn) and 27, 28, and 29 (King's Cliffe).

Private enterprise only provided 4 additional new houses (Collyweston 3 and Warmington 1).

4 clearance areas were declared at Nassington (17) and King's Cliffe (27, 28, 29) and were confirmed by the Ministry of Health after an inquiry held on the 28th September, 1938, at the Oundle Poor Law Institution by an Inspector of the Ministry, R. N. Stuart, Esq.

Particulars of visits, houses inspected for overcrowding and unfitness are included in the tabulated housing table for the whole area.

The Rural District Council controls 90 houses in the Northern Area as follows :—

	1919	1924	1930	1936
Collyweston ...	8	—	—	—
Duddington ...	12	—	—	—
Easton-on-the-Hill	24	—	—	—
King's Cliffe ...	—	4	4	—
Nassington ...	—	4	—	10
Polebrook	—	4	—	—
Warmington ...	—	6	2	12
Total	44	18	6	22

Smoke Abatement.—No action was found necessary during the year.

Elementary Schools.—There are 22 schools in use within the area : 18 visits were made with respect to sanitary conveniences.

Factory Act, 1937.—The new Act came into force on July 1st, 1938, and classified all premises as " factories "—with or without mechanical power. There are 26 such premises, including 17 bakehouses in the Northern Area. 74 visits of inspection were made during the year.

I am, Sir,
Yours obediently,
S. PARGETER,
Sanitary Inspector.

WHOLE DISTRICT.

No. 1. Inspection of Dwelling-houses during the year 1938.

1.	(*a*) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	386
	(*b*) Number of inspections made for that purpose ...	852
2.	(*a*) Number of houses included under subhead 1 above which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932	73
	(*b*) Number of inspections made for that purpose ...	393
3.	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	44
4.	Number of dwelling-houses (exclusive of those referred to under the preceding subhead) found not to be in all respects reasonably fit for human habitation	29

No. 2. Remedy of Defects during the year without service of formal notices.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	286

No. 3. Action under Statutory Powers during the year.

A. Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936 :

1.	Number of dwelling-houses in respect of which notices were served requiring repairs	0
2.	Number of dwelling-houses which were rendered fit after service of formal notices	0
	(*a*) By the Owner	0
	(*b*) By the Local Authority in default of Owner...	0

B.	Proceedings under the Public Health Act, 1936 :	
1.	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	1
2.	Number of dwelling-houses in which defects were remedied after service of formal notices	0
(*a*)	By the Owner	0
(*b*)	By the Local Authority in default of Owner	0
C.	Proceedings under Sections 11 and 13 of the Housing Act, 1936 :	
1.	Number of dwelling-houses in respect of which demolition orders were made	0
2.	Number of dwelling-houses demolished in pursuance of demolition orders	1
3.	Number of dwelling-houses repaired in pursuance of undertakings	4
4.	Number of dwelling-houses demolished in anticipation of demolition orders	8
D.	Proceedings under Section 12 of the Housing Act, 1936 :	
1.	Number of separate tenements or underground rooms in respect of which closing orders were made	0
2.	Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit	0

No. 4. Housing Act, 1936, Part 4. Overcrowding.

(*a*)	1.	Number of dwellings overcrowded at the end of the year	95
	2.	Number of families therein	97
	3.	Number of persons dwelling therein	582½
(*b*)		Number of new cases of overcrowding reported during the year	6
(*c*)	1.	Number of cases of overcrowding relieved during the year	22
	2.	Number of persons concerned in such cases	142½
(*d*)		Particulars of any cases in which the dwelling-houses have again become overcrowded after the Local Authority has taken steps for the abatement of overcrowding	0
(*e*)		Any other particulars with respect to overcrowding conditions upon which the Medical Officer of Health may consider it desirable to report	0

FACTORY AND WORKSHOP ACT, 1901, AND THE FACTORIES ACT, 1937 (which superseded the Act of 1901 on 1st July, 1938).

1.—INSPECTIONS for purposes of provisions as to health. Including inspections made by Sanitary Inspectors.

Premises	Number of		
	Inspections	Written Notices	Occupiers prosecuted
Factories with mechanical power	80	0	0
Factories without mechanical power	167	0	0
Other Premises under the Act (including works of building and engineering construction but not including outworkers' premises)... ...	—	—	—
Total ...	247	0	0

2.—DEFECTS FOUND.

Particulars	Number of Defects			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
Want of cleanliness (S. 1)	—	—	—	—
Overcrowding (S. 2)	—	—	—	—
Unreasonable temperature (S. 3)...	—	—	—	—
Inadequate ventilation (S. 4)	—	—	—	—
Ineffective drainage of floors (S. 6)	—	—	—	—
Sanitary Conveniences (S. 7) insufficient ...	—	—	—	—
Sanitary Conveniences (S. 7) unsuitable or defective	3	3	0	0
Sanitary Conveniences (S. 7) not separate for sexes	—	—	—	—
Other offences ... ... (Not including offences relating to Home Work or offences under the Sections mentioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921, and re-enacted in the Third Schedule to the Factories Act, 1937.)	—	—	—	—
Total ...	3	3	0	0

OUTWORK IN UNWHOLESOME PREMISES.

(Section 108 of Act of 1901 ; Section III of Act of 1937.)

Nil.